

BEFORE  
THE PUBLIC SERVICE COMMISSION OF  
SOUTH CAROLINA  
DOCKET NO. 2011-325-E - ORDER NO. 2011-978  
JANUARY 12, 2012

IN RE:	Application of South Carolina Electric & Gas Company for a Certificate of Environmental Compatibility and Public Convenience and Necessity for the Construction and Operation of a 230 kV Transmission Line from Its V.C. Summer Switchyard #1 to Its Killian Transmission Substation and Two 230 kV Transmission Lines from Its V.C. Summer Switchyard #2 to Its Lake Murray Transmission Substation	)	ORDER GRANTING A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC CONVENIENCE AND NECESSITY
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**I.                    INTRODUCTION**

This matter comes before the Public Service Commission of South Carolina (the “Commission”) on the Application of South Carolina Electric & Gas Company (“SCE&G” or the “Company”) for a Certificate of Environmental Compatibility and Public Convenience and Necessity for the construction and operation of a 230 kilovolt (“kV”) transmission line from its V.C. Summer Switchyard #1 to its Killian Transmission Substation and two 230 kV transmission lines from its V.C. Summer Switchyard #2 to its Lake Murray Transmission Substation. SCE&G filed this Application (the “Application”) on August 9, 2011, and contemporaneously served it on the South Carolina Office of Regulatory Staff (“ORS”), the chief executive officers of each municipality and the heads of each state and local governmental agency charged with the duty of protecting the environment or of planning land use in the county in which any

portion of the facility will be located. At the request of the Company, the Commission established this docket pursuant to the provisions in S.C. Code Ann. § 58-33-10 et seq. (1976 and Supp. 2010) (the “Siting Act”) and 26 S.C. Code Ann. Regs. 103-304 (1976, as amended).

A Notice of Filing and Hearing (the “Notice”) regarding the Application was prepared and issued by the Clerk’s Office of the Commission (the “Clerk’s Office”). By letter dated August 19, 2011, the Clerk’s Office instructed SCE&G to publish the Notice in newspapers of general circulation in the affected areas one time on or before August 29, 2011, and to provide proof of such publication to the Commission by September 19, 2011. The Company complied with the instructions received from the Clerk’s Office by timely publishing the Notice and thereafter filing an affidavit of publication attesting to publication as directed by the Clerk’s Office.

The Notice established September 19, 2011, as the date by which interested parties or entities could timely file petitions to intervene or present their views in writing to the Commission. Richland County, South Carolina (the “County”) and the Town of Blythewood, South Carolina (the “Town”) each filed a Petition to Intervene with the Commission on September 7, 2011.

ORS is automatically a party to the certification proceeding in this docket pursuant to S.C. Code Ann. §§ 58-4-10(B) (Supp. 2010) and 58-33-140(1)(b) (Supp. 2010). The South Carolina Department of Health and Environmental Control, South Carolina Department of Natural Resources, and South Carolina Department of Parks,

Recreation and Tourism were listed as parties based on the provisions of S.C. Code Ann. § 58-33-140, but did not appear or take part in the certification proceeding.

The Commission convened the hearing in this matter on October 20, 2011, and heard testimony from two public witnesses on that date. The hearing reconvened on October 27, 2011, at which time the Commission heard testimony from one additional public witness, and from the witnesses from the parties.

At the hearing in this matter, SCE&G presented direct and rebuttal testimony of Hubert C. Young, III, Manager of Transmission Planning for SCE&G, and Dwight M. Hollifield, ASLA, Director of the Facilities Planning and Siting Division for Pike Energy Solutions, LLC. The Company also presented rebuttal testimony of Stephen A. Byrne, Executive Vice President for Generation and Transmission and Chief Operating Officer of SCE&G. ORS presented the direct testimony of Michael L. Seaman-Huynh, Senior Electric Utilities Specialist in ORS's Electric Department. The County presented the direct and surrebuttal testimony of Val Hutchinson, a member of the County Council of Richland County and Chair of the Development and Services Committee for the County, and Dr. James B. Atkins, Manager of the Environmental Planning Division in the Richland County Planning and Development Services Department. The Town presented the direct and surrebuttal testimony of John P. Perry, Administrator of the Town, and the direct testimony of Keith T. Bailey, Mayor of the Town.

At the beginning of the proceeding on October 27, 2011, SCE&G announced that it had reached a settlement agreement with the Town. Under that settlement, the Town agreed to withdraw the opposition to SCE&G's request for a Certificate of Environmental

Compatibility and Public Convenience and Necessity for the lines as requested in the Application. SCE&G and the Town agreed that each would submit all direct, rebuttal, and surrebuttal testimony previously filed but neither party would cross-examine the other party's witnesses.

On December 14, 2011, the County and SCE&G entered into a Settlement Agreement. Under that Settlement Agreement, the County also agreed to withdraw their opposition to SCE&G's request for a Certificate of Environmental Compatibility and Public Convenience and Necessity for the lines as requested in the Application. Also, on December 14, 2011, the Town, the County, and SCE&G filed with the Commission an Explanatory Brief and Joint Motion to Approve the Settlement Agreement between SCE&G and the Town and the Settlement Agreement between SCE&G and the County (the "Settlement Agreements"). In that document, the Town, the County, and SCE&G indicated that, in as much as ORS's witness, Mr. Michael Seaman-Huynh, testified in support of SCE&G's request for the issuance of the Certificate of Environmental Compatibility and Public Convenience and Necessity in this docket as requested in the Application, all parties who had intervened in this proceeding now withdraw their opposition to the issuance of the Certificate of Environmental Compatibility and Public Convenience and Necessity as requested by SCE&G. On that basis, the Town, the County, and SCE&G requested the Commission to approve the Settlement Agreements and issue an order granting the relief requested in the Application.

For the reasons set forth below, the Commission grants the motion by the Town, the County, and SCE&G to approve the terms of the Settlement Agreements and grants the relief requested by SCE&G in the Application.

## **II. STATUTORY STANDARDS**

The Siting Act requires that before constructing and operating new transmission facilities with an operating voltage in excess of 125 kV the owner must obtain a Certificate of Environmental Compatibility and Public Convenience and Necessity from the Commission. In issuing such a Certificate, the Commission is required to make six statutorily-mandated findings. Those findings concern:

1. The basis of the need for the facility. S.C. Code Ann. § 58-33-160(1)(a);
2. The nature of the probable environmental impact of the facility. S.C. Code Ann. § 58-33-160(1)(b);
3. Whether the impact of the facility upon the environment is justified, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. S.C. Code Ann. § 58-33-160(1)(c);
4. Whether the facilities will serve the interests of system economy and reliability. S.C. Code Ann. § 58-33-160(1)(d);
5. Whether there is reasonable assurance that the proposed facility will conform to applicable state and local laws and regulations issued thereunder, including any allowable variance provisions therein, except that the Commission may

refuse to apply any local law or local regulation that is unreasonably restrictive. S.C. Code Ann. § 58-33-160(1)(e); and

6. Whether public convenience and necessity require the construction of the facility. S.C. Code Ann. § 58-33-160(1)(f).

The Commission has considered each of these statutory standards in light of the evidence on the record in this proceeding and the agreement of certain parties as set forth in the Settlement Agreements. On that basis, the Commission makes findings as set forth below:

### **III. FACTS AND LEGAL DETERMINATIONS**

#### **A. The Need for the Facilities**

As indicated in the Application, the basis for the need for these facilities is SCE&G's need to route power to its customers from two new nuclear units that are under construction at the V.C. Summer Nuclear Station in Jenkinsville, South Carolina ("Unit 2" and "Unit 3" or collectively the "Units"). (Tr. II, pp. 88-90.) SCE&G is building the Units in partnership with the South Carolina Public Service Authority and intends to place them into commercial operation no later than 2016 and 2019 respectively. When operational, the Units will provide a total of approximately 2,234 net megawatts ("MW") of power, 55% of which will be available to serve SCE&G's customers. (Tr. II, pp. 88-89.)

On May 30, 2008, SCE&G filed an Application for Certificate of Environmental Compatibility and Public Convenience and Necessity under the Siting Act for the Units. This Application was combined with an Application for an order under the Base Load

Review Act, S.C. Code Ann. §§ 58-33-210 *et seq.* (the “Base Load Review Act”) approving the selection of technology and contractors, and the anticipated cost and construction schedules of the Units. After extensive discovery and a hearing involving more than 20 witnesses, the Commission granted SCE&G a Certificate of Environmental Compatibility and Public Convenience and Necessity to construct and operate the Units, along with a Base Load Review Order for the Units. The Certificate of Environmental Compatibility and Public Convenience and Necessity for the Units was issued in Order No. 2009-104(A) and was based on express findings by the Commission that the Units will serve the interests of system economy and reliability, that their environmental impacts are justified, and that the public convenience and necessity supports their construction. Those findings were upheld by the South Carolina Supreme Court in Friends of the Earth v. Public Service Commission of South Carolina, 387 S.C. 360, 692 S.E.2d 910 (2010).

In the proceedings leading to Order No. 2009-104(A), SCE&G entered into evidence generation interconnection studies and environmental reports that recognized the need for the transmission lines at issue here and included an assessment of the costs and environmental impacts associated with those lines. However, at the time Order No. 2009-104(A) was issued, the precise routing of these lines had not been determined and SCE&G indicated that it would file Siting Act applications specific to these lines at a later date. The Application in this docket is the first of two such filings that SCE&G anticipates making, which seek a Certificate of Environmental Compatibility and Public Convenience and Necessity for the lines identified in the earlier proceedings.

At the hearing in this matter, SCE&G's witness Mr. Hubert C. ("Clay") Young testified that the generation interconnection studies he and his staff prepared had identified a total of four new transmission lines that will be needed to route the electric power generated by the Units onto SCE&G's transmission system. (Tr. II, pp. 90-92.)

Those lines are as follows:

- i. The VCS1-Killian 230 kV Line (the "**Killian Line**") will route power to load centers in the northeast Columbia area. (Tr. II, p. 90.) The Killian Line will run from the V.C. Summer Station site to the existing Killian 230/115 kV substation located near the intersection of I-77 and Killian Road in northeast Columbia. Along the way, the Killian Line will ultimately connect to substations and other transmission facilities serving loads in the I-77 corridor near and to the south of Winnsboro, South Carolina as they are constructed. The Killian Line is one of two lines required to support the testing and operation of Unit 2. (Tr. II, pp. 83-84.)
- ii. The VCS2-Lake Murray 230 kV Line No. 2 (the "**Lake Murray Line**") will route power from the Units to load centers in the Lake Murray and Lexington, South Carolina areas. (Tr. II, p. 90.) The Lake Murray line will run from the V.C. Summer Station site to the existing Lake Murray 230/115 kV substation near the Saluda Dam. Like the Killian Line, the Lake Murray Line is needed to support the testing and operation of Unit 2. (Tr. II, p. 84.)
- iii. The VCS2-St. George Lines Nos. 1 & 2 (the "**St. George Lines**") will route power from the Units to Charleston area load centers and other load centers in the South Carolina Lowcountry. (Tr. II, p. 91.) The St. George Lines will run from the V.C.



Summer Station site to a new 230/115kV substation to be built near St. George, South Carolina. The two St. George Lines are needed to support the testing and operation of Unit 3, and SCE&G indicates that it will file a Siting Act application specifically for the St. George Lines at a later time. (Tr. II, p. 92.) However, in the present proceeding, SCE&G is seeking authority to construct and operate a 22-mile segment of the new VCS2-St. George 230 kV Line No. 1 (the “*St. George Segment*”) which SCE&G plans to temporarily terminate at the Lake Murray 230/115 kV substation. Once placed into service, the St. George Segment will serve as a temporary replacement for the existing VCS1-Lake Murray 230 kV Line No. 1 when such line must be taken out of service later in the construction plan so that it can be rebuilt on common structures with the VCS2-St. George 230 kV Line No. 2. As Mr. Young testified, building the St. George Segment at this time will allow the system to operate reliably while the VSC1-Lake Murray Line No. 1 is out of service being rebuilt. (Tr. II, p. 102 and 104.) In addition, because the St. George Segment and the Lake Murray Line will share the same right-of-way and the same structures, building them at the same time will avoid the need to mobilize construction crews twice to work on the same structures and thereby will reduce construction costs. (Tr. II, p. 93.)

Mr. Young testified that the need for these four new lines (“Lines”) was determined by generation interconnection studies which showed them to be required to support the reliability and economy of SCE&G’s electric system when the Units are added to the generation fleet. (Tr. II, pp. 85-87.) Those studies were based on the Transmission Planning Standards established by the North American Electric Reliability

Corporation (“NERC”) as supplemented by SCE&G’s own Long Range Planning Criteria. (Tr. II, p. 84.) Under these standards and criteria, SCE&G designs its transmission system with the goal of maintaining a level of reliable transmission service such that:

- i. No impacts more serious than local load impacts are expected to occur upon specified contingencies and events on the system; and
- ii. After appropriate switching and re-dispatching, the system can serve all non-radial loads and operate within acceptable limits going forward.

(Tr. II, p. 84.)

The ability of the transmission system to meet these requirements is measured by testing the response of the system to various possible events and conditions by conducting analyses that simulate the power flows that result. These tests include, among others, tests that evaluate the performance of the system in the event of the loss of any one transmission or generation facility, followed by appropriate switching and re-dispatching, and then followed by the loss of any other transmission or generation facility. (Tr. II, p. 85.)

Mr. Young testified that, using these tests, SCE&G analyzed multiple scenarios to determine what improvements would be needed to operate the system reliably and efficiently when the Units are connected to the grid. (Tr. II, pp. 89 and 94-95.) The first of these scenarios sought to determine if existing facilities could reliably and efficiently transmit the additional power from the Units without any upgrades or additions to transmission facilities. (Tr. II, pp. 89-90 and 94.) The studies showed that when the Units

come on line, the system will not be able to meet NERC and SCE&G reliability standards without upgrades or additions. (Tr. II, pp. 90-91 and 94.) SCE&G then ran studies to see if the existing facilities could reliably and efficiently transmit the additional power if upgrades were made but no new lines were built. These studies showed that upgrading existing facilities to provide the required level of reliability either was not technically feasible or was not a cost-effective way to meet the reliability criteria. (Tr. II, pp. 94-95.) SCE&G then ran studies to determine what new lines and other facilities would be required, along with other upgrades, to route the additional power onto its system reliably and economically. Those studies showed that the Killian Line, the Lake Murray Line, and the two St. George Lines were necessary to route power reliably and economically from the Units onto SCE&G's transmission system. (Tr. II, pp. 94-96.) As exhibits to his testimony, Mr. Young provided the detailed transmission interconnection studies which demonstrate the basis for the need for the Killian Line, the Lake Murray Line, and the St. George Lines, as well as the contributions to system reliability and economy of building them. (Hearing Exhibit No. 3 (HCY-2).)

As set forth in Mr. Young's testimony, the projected cost of construction for the Killian Line is approximately \$47,000,000. (Tr. II, p. 105.) The projected cost of construction for the Lake Murray Line and the St. George Segment is approximately \$29,000,000. The new lines are scheduled to be in service in December 2014. (Tr. II, p. 105.)

The ORS's expert witness in this matter, Mr. Seaman-Huynh, testified that ORS had reviewed SCE&G's interconnection studies and other information related to the basis

for the need for the facilities and their contribution to system reliability and economy. (Tr. II, pp. 250-255.) Mr. Seaman-Huynh supported Mr. Young's conclusion that the lines under review here serve the interests of system economy and reliability and are supported by public convenience and necessity. (Tr. II, p. 256.)

The Commission finds Mr. Young's testimony concerning the basis for the need for the Killian Line, the Lake Murray Line, and the St. George Segment (the "Lines"), and the contributions to system economy and reliability they represent, as corroborated by Mr. Seaman-Huynh and by the exhibits Mr. Young provided, to be credible. This evidence along with the agreement by the County and the Town as set forth in the Settlement Agreements, support a finding by the Commission that the Lines are necessary, that they support system economy and reliability, and that they are justified by public convenience and necessity. Accordingly, the Commission finds that as to these Lines the statutory standards of S.C. Code Ann. §§ 58-33-160(1)(a),(d), and (f) are fully met by the evidence of record here.

**B. The Nature and Justification of the Probable Environmental Impacts of the Facilities in Light of the Alternatives**

**1. Overview**

The Siting Act also requires the Commission to evaluate the nature of the probable environmental impact from the Lines and the justification of those impacts in light of the alternatives. One important fact about the Lines is that, with the exception of one 6-mile segment, SCE&G plans to build the entire 59 corridor miles that the Lines represent within existing rights-of-way. (Tr. II, p. 99.) SCE&G intends to accomplish

this either by building the new Lines in unoccupied portions of existing rights-of-way corridors (as it will do with the Lake Murray Line and the St. George Segment) or by taking down the existing lines and rebuilding them on shared structures with new Lines (as it will do with most of the Killian Line). The only exception is the approximate 6-mile segment of the Killian Line between the future Blythewood 230/115kV Substation and the Killian 230/115kV Substation (the “Blythewood-Killian Segment”). (Tr. II, p. 99.) For reasons that are discussed below, SCE&G concluded that to the extent that new right-of-way is available, system economy and reliability would not be furthered by building the Blythewood-Killian Segment on existing right-of-way but instead that system reliability and economy are furthered by building the Blythewood-Killian Segment on new right-of-way. (Tr. II, pp. 99-101.)

The record amply supports the environmental benefits of SCE&G’s decision to build the Lines on existing right-of-way where it is practical and economical to do so. As Mr. Hollifield testified, use of existing rights-of-way for the majority of the length of the Lines minimizes the amount of clearing, wetlands impacts, visual impacts, and other impacts to existing land uses from the new Lines. (Tr. II, pp. 147-149, 151-152, 155-157, and 159-160.)

This conclusion is substantiated by the environmental reports concerning each of the Lines, which Mr. Hollifield presented as exhibits to his testimony. (Hearing Exhibit No. 4 (DMH-2).) These reports were based on literature and record reviews and extensive field-work by biologists, botanists, cultural resource historians, and others to ascertain the probable environmental impact of constructing and operating the Lines

along the selected routes and in some cases along other potential routes. These reports concluded that these Lines are not anticipated to have any significant adverse short-term or long-term impact on the environment. (Tr. II, p. 146 and 154.) In reaching this conclusion, biologists and botanists conducted field studies to ascertain whether the construction and operations of the Lines were likely to have any adverse impact on any state or federally-listed rare, threatened, or endangered plant or animal species. (Tr. II, p. 146 and 154.) They determined that such species were not likely to be adversely affected by the Lines. (Tr. II, p. 147 and 155.) Furthermore, while there are 59 corridor miles represented by the Lines, wetlands impacts will be limited to approximately 18.6 acres. On those 18.6 acres the wetlands will be converted from forested wetlands to herbaceous wetlands. (Tr. II, pp. 147-148 and 156.) No wetlands will be destroyed. Instead, Mr. Hollifield testified that this conversion will mean that the wetlands in question will support a different suite of plants and animals but the wetlands will continue to perform their functions of surface water storage, subsurface water storage, nutrient cycling, and particle retention. (Tr. II, pp. 147-149 and 155-157.) In addition, before construction on the Lines begins, all routes will be reviewed and approved by the U.S. Army Corps of Engineers and other state and federal resource agencies and will undergo Section 401 certification and Section 404 permitting under the Clean Water Act. (Tr. II, p. 148 and 156.) Even though there will not be any material loss of wetlands due to construction of the Lines, SCE&G will be required to prepare and undertake an appropriate compensatory mitigation plan as approved by the Army Corps of Engineers, the South Carolina Department of Natural Resources, and other state and federal regulatory and

resource agencies. (Tr. II, p. 148 and 156.) As to construction itself, when operating near or within wetland areas during construction of the Lines, SCE&G will be required to employ established wetland protection practices including the use of erosion control measures wherever they may be required to prevent translocation of sediment from construction sites to wetlands or streams. In stream buffer zones, low-growing vegetation will be left intact to the maximum practical extent, and root mats will not be disturbed. (Tr. II, p. 149 and 157.)

These facts were set forth in Mr. Hollifield's testimony and the various studies that form part of the environmental reports prepared on each of the Lines. Based on these facts, Mr. Hollifield testified that the construction and operation of the Lines would not have a material adverse impact on the natural environment. (Tr. II, pp. 147, 149, 155, and 157.)

As to cultural resources, Mr. Hollifield testified that SCE&G has entered into a "Cultural Resources Management Plan and Agreement" ("CRMPA") with the S.C. State Historical Preservation Office and the Army Corps of Engineers regarding management of potential cultural resources within all proposed line right-of-way corridors associated with new Lines. (Tr. II, p. 149 and 157-159.) The identification, assessment, and protection of such cultural resources are being managed according to the provisions of this plan. Pursuant to the CRMPA, SCE&G engaged Brockington and Associates, a cultural resources firm, to perform a comprehensive Phase I Cultural Resource Survey throughout all areas along the Lines, although land disturbance will not occur over the entire area within the right-of-way. (Tr. II, p. 150 and 158.) Brockington determined that

significant archeological and other cultural resources are not likely to be adversely affected in connection with the construction of the Lines along the selected routes. (Tr. II, pp. 150-151 and 158-159.) Furthermore, once the specific transmission structure locations have been determined and staked in the field, SCE&G will engage Brockington to perform additional Cultural Resource investigations pursuant to the CRMPA. If cultural resources are discovered, the terms of the CRMPA will apply and protection measures, including the possible relocation of structures, will be instituted at that point.

As to visual impacts, Mr. Hollifield testified that for the Killian Line they will be low overall in large part because that line will replace an existing single circuit line for at least 31 miles of its 37 mile length. (Tr. II, p. 151.) Mr. Hollifield testified that SCE&G conducted an extensive, community-based, site selection process for the 6-mile Blythewood-Killian Segment that will be built on the new right-of-way. (Tr. II, pp. 151-152.) The selected route was chosen based on a careful evaluation of a wide range of environmental, cultural, visual, and other criteria. (Tr. II, p. 143.) Each of those factors was individually assessed and scored with the scores for each set of factors normalized to provide comparability among the results. Based on this scoring, the selected route was found to minimize the impacts from the Blythewood-Killian Segment on all of these factors in aggregate. In addition, the route selected was determined to have the lowest visual impacts of any of the five alternate routes that scored most favorably in terms of aggregate impacts as determined by the siting study. (Tr. II, pp. 152-153.) The route selected also had the lowest cost of any of the five routes that scored most favorably in terms of aggregate impacts. (Tr. II, p. 144.)



As to the Lake Murray Line and the St. George Segment, Mr. Hollifield testified the visual impacts are low in the largely undeveloped areas between the V.C. Summer Station site and the point identified as Chapin Junction, near Chapin, South Carolina. (Tr. II, p. 159.) From there to the Lake Murray 230/115 kV Substation, visual impacts will be moderate due primarily to the development that has occurred over the years in close proximity to the existing right-of-way. (Tr. II, p. 160.) However, because SCE&G will build the lines on an existing transmission corridor parallel to an existing double-circuit 115 kV line, visual impacts of this part of the Lake Murray Line and the St. George Segment will be mitigated.

The ORS's expert witness in this matter, Mr. Seaman-Huynh, testified that ORS had reviewed the environmental reports and other information provided by SCE&G related to the nature of the probable environmental impact from the new Lines and the justification of those impacts in light of the alternatives. (Tr. II, p. 250.) Mr. Seaman-Huynh supported Mr. Hollifield's and Mr. Young's conclusion that the probable environmental, cultural, visual, and other impacts from the new Lines has been appropriately evaluated and are justified in light of the alternatives. (Tr. II, p. 256.)

## **2. Intervenor's Arguments**

Through the testimony of their witnesses, the Town and the County raised several objections regarding the siting of the Killian Line. Those objections related to a) the visual impact of the Killian Line in the area where it will cross Blythewood Road, b) the visual and land use impacts of the Killian Line in the area where the Killian's crossing development is to be located, c) the environmental and land use impacts of the Killian

Line on a parcel of land where the County plans to build a recreation and sports complex for the northeast Columbia area, and d) the environmental and land use impacts of the Killian Line on a parcel of property held by the Richland County Conservation Commission for conservation purposes. In addition, in its testimony, the County took the position that there were methodological deficiencies in how factors were scored and weighed in SCE&G's siting studies that require the Commission to dismiss the Application. In response to these contentions, SCE&G provided rebuttal testimony supporting the appropriateness of the routes chosen for the Killian Line and supporting the soundness of the methodology it employed in conducting its siting studies.

In light of the Settlement Agreements, the County and the Town have now withdrawn the arguments and contentions that their witnesses had raised against the routes chosen for the Killian Line and the methodologies used to locate that line. Accordingly, the Commission is not required to address these arguments and contentions in detail. However, in keeping with its responsibilities under the Siting Act, the Commission has reviewed the evidence presented by SCE&G in light of the contentions raised at the hearing. The Commission finds that the evidence SCE&G presented through its witnesses Mr. Byrne, Mr. Young, and Mr. Hollifield as to these matters is credible and persuasive. The Commission finds that this evidence supports a finding by the Commission (a) that the methodologies used by the Company in the siting studies presented here were appropriate, (b) that the environmental impacts of the Killian Line have been appropriately evaluated and quantified and (c) that those impacts are fully

justified in light of the available and practical alternatives to the proposed siting of that line.

### **3. Conclusion Concerning Environmental Impact**

Based on the evidence of record, the Commission finds that the environmental impacts of the Lines as a whole have been appropriately evaluated and described and that these impacts are minimal, and they are justified in light of the alternatives. Accordingly, the Commission find that as to these Lines, the statutory standards of S.C. Code Ann. §§ 58-33-160(1)(b) and (c) are fully met by the evidence of record here.

#### **C. Assurance that the Proposed Facility Will Conform to Applicable State and Local Laws and Regulations**

The Siting Act requires the Commission to determine whether there is reasonable assurance that the proposed facility will conform to applicable state and local laws and regulations issued thereunder. S.C. Code Ann. § 58-33-160(1)(e). Mr. Young testified unequivocally that the Lines will be constructed and operated in conformity with all state and local regulations. (Tr. II, pp. 110-111.) Moreover, the testimony in the record of this proceeding documents the Company's extensive program for ensuring that the Lines will be constructed in conformity with all applicable state and federal environmental laws and regulations. (Tr. II, pp. 129-131, 147-149 and 155-157.) No party has identified any state or local laws or regulations that construction or operation of the Lines would contravene. County Council Member Hutchinson affirmatively testified that transmission lines can be constructed in all zoning districts. (Tr. III, pp. 460-461.) The Killian's Crossing Planned Development District Ordinance does not contain any terms limiting

the construction and operation of transmission lines. The Commission finds that the Lines fully meet the requirements of S.C. Code Ann. § 58-33-160(1)(e).

**D. SCE&G's Alternative Route Request**

As mentioned above, SCE&G presented evidence that system economy and reliability would support the construction of the Blythewood-Killian Segment on new right-of-way, if doing so were practical. The reason is related to the additional lines that must be built to support growing demands in this area. Presently, there is a 115 kV line that runs from Blythewood to Killian. It is feasible to build the Blythewood-Killian Segment on this right-of-way by removing the existing 115 kV line and rebuilding it on common structures with the Blythewood-Killian Segment. (Tr. II, p. 107.) However, SCE&G's load studies have identified the near-term need for a second 115 kV line between Blythewood and Killian to support growing demands in that area. (Tr. II, pp. 100-101.) As Mr. Hollifield testified, system reliability and safety considerations preclude locating three transmission lines of such importance to system reliability on a single set of structures. (Tr. III, pp. 444-445.) For this reason, if SCE&G were to use the existing 115 kV right-of-way for the Blythewood-Killian Segment, it would then have to build the second Blythewood-Killian 115 kV line on a new right-of-way. This would increase the overall cost of the construction plan by approximately \$6.3 million and would result in three transmission lines being built in two transmission corridors, just as would be the case under the preferred alternative, *i.e.*, to leave the existing 115 kV Line in place and build the Blythewood-Killian Segment and the new 115 kV line together on new right-of-way. (Tr. II, pp. 109-110.)

However, SCE&G recognizes the importance of timely completion of the Blythewood-Killian Segment to its overall nuclear construction plans. Accordingly, in the interest of flexibility, SCE&G has asked the Commission to allow it to construct the Blythewood-Killian Segment on the existing 115 kV line right-of-way as an alternative route if SCE&G were not able to acquire new rights-of-way on reasonable terms or on a reasonable schedule. (Tr. II, p. 106-107.) SCE&G recognizes that, all other things being equal, this alternative route for the Blythewood-Killian Segment is approximately \$6.3 million more expensive than the preferred route. Furthermore, for the reasons stated in Mr. Byrne's testimony, switching to the alternative route could also involve significant licensing and permitting delays. (Tr. III, pp. 278-281.) Nevertheless, SCE&G believes that having this alternative available could be important to SCE&G if other parties refuse to grant rights-of-way, challenge condemnation actions, seek to leverage the tight construction schedule to their financial advantage, or otherwise create problems with the permitting and building of the Blythewood-Killian Segment on new right-of-way.

Based on this evidence of record, the Commission finds that if constructing the Blythewood-Killian Segment on new rights-of-way proves to be impractical from a cost or schedule perspective, having the proposed alternative available to SCE&G would be important to allow the Company to meet its primary goal in constructing the Lines, which is to be sure that they are completed in time to support the construction and testing of Unit 2. For that reason, the Commission finds that if constructing the Blythewood-Killian Segment on new rights-of-way proves to be impractical from a cost or schedule perspective, the proposed alternative route using the existing 115 kV right-of-way would

contribute to system economy and reliability, would be environmentally justified, and would be supported by public necessity and convenience. For that reason and in addition to the primary route described in SCE&G's Application, the Commission also approves this alternative route as a part of the Certificate of Environmental Compatibility and Public Convenience and Necessity granted in the docket.

**E. Conclusion as to the Public Necessity and Convenience of the Lines**

In conclusion, the proposed Lines and routes presented here, including the alternative route, represent a feasible, appropriate, and cost-effective means for maintaining system reliability and transmitting the additional electric power from V.C. Summer Nuclear Station Units 2 and 3 to SCE&G's customers. They are clearly justified in light of the available alternatives. For these reasons, the Commission finds that the public convenience and necessity supports issuance of a certificate for construction of these Lines as proposed. S.C. Code Ann. § 58-33-160(1)(f).

**IV. REROUTING OF THE SPORTS COMPLEX LINE**

One of the requests that SCE&G agreed to in its Settlement Agreement with the County was that SCE&G would relocate, at its expense, an existing 230/115 kV line where it crosses a parcel of property owned by the County in northeast Columbia, south of Clemson Road. The property in question is property on which the County intends to build a recreation and sports complex. The Blythewood-Killian Segment also crosses this property and as part of the Settlement Agreement with the County, the County will grant SCE&G right-of-way for the Blythewood-Killian Segment. However, in examining the plans for the sports complex, SCE&G and the County determined that for safety and

reliability reasons the existing 230/115 kV line on the property (“Existing Line”) would need to be relocated to allow development of the complex to proceed as planned. In its Explanatory Brief and Joint Motion to Approve the Settlement Agreement between SCE&G and the Town and the Settlement Agreement between SCE&G and the County (“Motion”), SCE&G asked the Commission to determine that the relocation of this line is the replacement of an existing facility with a like facility and so pursuant to S.C. Code Ann. § 58-33-110(1) does not require the Commission to issue a Certificate of Environmental Compatibility and Public Convenience and Necessity authorizing such relocation.

As set forth in the Motion, the relocation of the Existing Line will take place entirely on property owned by the County, and will not change the capacity or function of the Existing Line in any material way. Accordingly, the facts demonstrate that the relocation constitutes “[t]he replacement of an existing facility with a like facility” and so does “not constitute construction of a major utility facility” for purposes of the Siting Act. S.C. Code Ann. § 58-33-110(1). The relocation does not require the Commission to issue a Certificate of Environmental Compatibility and Public Convenience and Necessity.

**V. FINDINGS**

NOW THEREFORE, based upon the foregoing, IT IS HEREBY DECLARED AND ORDERED THAT:

1. SCE&G is hereby granted a Certificate of Environmental Compatibility and Public Convenience and Necessity for the construction and operation of the Lines,

specifically a 230 kilovolt (“kV”) transmission line from its V.C. Summer Switchyard #1 to its Killian Transmission Substation (the Killian Line) and two 230 kV transmission lines from its V.C. Summer Switchyard #2 to its Lake Murray Transmission Substation (the Lake Murray Line and the St. George Segment), along the primary and alternate routes described in the Company’s Application. In granting this Certificate, this Commission is not approving any costs and/or funding cited for the facilities in question, but will examine such costs and/or funding in a future rate case.

2. SCE&G has shown the basis of the need for the Lines in that they are necessary to route the power to be generated by V. C. Summer Nuclear Station Units 2 and 3 onto its transmission system to serve reliably SCE&G customers in the northeast Columbia, Lake Murray, and Lexington areas, and to support reliability during future construction of the St. George Line No. 2, all the while ensuring that SCE&G remains in compliance with applicable transmission system reliability standards.

3. SCE&G has shown the nature of the probable environmental impact from construction and operation of the Lines is minimal and, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations, this minimal impact is justified. SCE&G selected routes for the Lines in a way that appropriately reduces environmental, land use, cultural resource, and aesthetic effects.

4. SCE&G has shown the Lines will serve the interests of system economy and reliability by allowing power generation by V.C. Summer Nuclear Station Units 2



and 3 to be reliably and efficiently routed through its transmission system for delivery to customers.

5. SCE&G will notify ORS and the Commission should it make the decision to use existing right-of-way as the route for the Blythewood-Killian Segment, as discussed above.

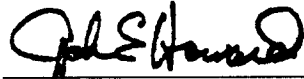
6. SCE&G will follow all South Carolina, Commission, and local government regulations and laws arising from matters set forth in the Application as qualified herein.

7. Public convenience and necessity require the construction of the Lines.

8. The removal and rerouting of the Existing Line on the site of property purchased by the County for a recreation and sports complex south of Clemson Road constitutes “[t]he replacement of an existing facility with a like facility” and so does “not constitute construction of a major utility facility” and therefore does not require a Certificate of Environmental Compatibility and Public Convenience and Necessity under the terms of the Siting Act, S.C. Code Ann. § 58-33-110(1).

9. This Order shall remain in full force and effect until further order of the Commission.

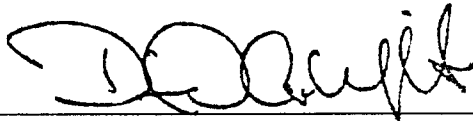
BY ORDER OF THE COMMISSION:



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John E. Howard, Chairman

ATTEST:



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David A. Wright, Vice Chairman  
(SEAL)